



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

BULLETIN
OF THE
TORREY BOTANICAL CLUB.

Vol. IX.]

New York, October, 1882,

[No. 10.]

New Western Plants.

By EDWARD LEE GREENE.

LINUM (HESPEROLINON) CLEVELANDI.—Slender and diffusely paniculate, $\frac{1}{2}$ –1 foot high, glaucous and, to the naked eye, smooth, but under a lens minutely scabrous-puberulent; leaves alternate, linear-lanceolate, 3–6 lines long; stipular glands wanting; pedicels solitary in the axils of the leaves, 6–10 lines long; sepals ovate, acute, smooth and entire, only a line long; petals yellow, 2-toothed at base, not much exceeding the sepals; styles 3; capsule obtuse, little exceeding the calyx.

Collected in the vicinity of Allen's Springs, Lake County, Cal., June, 1882, by Mr. D. Cleveland.

A very well-marked species, to come in between *L. micranthum* and *L. adenophyllum*; differing from the former in its yellow flowers, and from the latter by the absence of glands.

ASTRAGALUS CLEVELANDI.—Sparingly and minutely appressed pubescent, or at length nearly glabrous, stems rather slender, a foot or more high, from a perennial root; leaflets 15–19, oblong-lanceolate, less than a half inch long; peduncles longer than the leaves, and bearing slender racemes 3–6 inches long; flowers hardly more than 2 lines long; the calyx rather villous, its subulate teeth about equalling the tube; corollas white or cream-colored; pod unknown.

Collected in Indian Valley, Lake County, Cal., June, 1882, by Mr. D. Cleveland.

A species whose singularly long racemes of small whitish flowers give it a very striking likeness to *Melilotus alba*.

SAXIFRAGA MALVAEFOLIA.—Near *S. Parryi*, but much larger; scape a foot or two high, minutely and rather sparingly glandular-puberulent; leaves rounded-cordate, obscurely lobed and closely toothed, an inch or more in diameter, on petioles somewhat shorter, hairy on the veins beneath, and appearing with the flowers; flowers few and rather large, in a cymose panicle; calyx-teeth triangular, equalling, or even somewhat longer than the short tube, which is truncate at base, and not conspicuously nerved; petals white, obovate-oblong, inserted by short claws nearly in the sinuses of the calyx; filaments subulate, borne a little lower down; carpels united to near the abruptly and widely diverging summits; style stout, shorter than the beak; root woody-fibrous, with no trace of corm.

Known only by a single specimen, said to have been brought from Santa Rosa Island, off the coast of California.

Though closely allied to *S. Parryi*, Torr., it is very distinct, having no corm or bulb, and sending up its leaves and scapes simultaneously. Its calyx is much broader and shorter than in that species, and it is a much larger plant; moreover, its leaves are of thicker texture, scarcely lobed at all, resembling those of *Malva rotundifolia*.

CHAMAESARACHA PHYSALOIDES.—Annual (?), glabrous, stems apparently a foot or two high, with spreading, slightly wing-angled branches; leaves ovate, an inch or more long, the lower nearly entire, the upper with coarsely sinuate-toothed margins; flowers on slender pedicels nearly two inches long; calyx small, and, with the upper portion of the pedicel, puberulent with minute, flat, scale-like hairs; corolla cream-colored, $\frac{3}{4}$ inch broad; fruit unknown.

Collected in the Patagonia Mountains of the southern part of Arizona in the month of August, 1881, by Mr. S. P. Buckminster, in a single branch only, which shows a true *Chamaesaracha*, as to calyx and corolla, with the general aspect of an annual *Physalis*.

HOLOZONIA, *Gen. nov.*

Head heterogamous, with 6–8 pistillate, fertile rays, and about 16–20 hermaphrodite but sterile disk-flowers. Involucre of as many herbaceous scales as there are ray flowers, each scale completely and closely enfolding its obovate-oblong, obcompressed, smooth akene. Receptacle small, flat, its chaff united into a tubular, 10–12-toothed cup enclosing the disk-flowers. Corollas white; those of the ray purple-tinted, deeply cleft into 3 linear divisions, open during the whole day; those of the disk 5-lobed, Pappus of the ray a hyaline, saucer-shaped, entire crown; of the disk, a pair of extremely slender, deciduous scales, which equal the corollas.

A Californian herb, between *Hemizonia* and *Lagophylla*, but of very distinct generic type, with the aspect of the former, and the obcompressed, completely enfolded ray-akenes of the latter, but differing from it by its perennial root, its united chaff, and especially by the remarkable pappus of both ray- and disk-akenes.

HOLOZONIA FILIPES (*Hemizonia filipes*, Hook. & Arn., Bot. Beech. Suppl. 356. *Lagophylla filipes*, Gray, Bot. Whipple, 109. Bot. Mex. Bound. 101. Bot. Cal. i, 367.)—The plant has been long known in a very imperfect way. It is not in the least strange that the author of the Botany of Capt. Beechey's Voyage should have placed it in *Hemizonia*, for its whole aspect is so extremely like *Hemizonia luzulaefolia*, with which it grows, that the present writer, at first sight, passed it by for a mere slender form of that species. Dr. Gray, before the fruit was known, transferred it to *Lagophylla* on the strength of the complete enclosure of the ray-akenes by the involucre scales; but that is its only point of contact with that genus. It has still the chaffy cup of *Euhemizonia*, as also its numerous white flowers.

But, while the character of its akenes forbids its admission to *Hemizonia*, its perennial, rhizomatous root, and very singular pappus as certainly exclude it from *Lagophylla*. The first specimens of this rare plant, showing mature akenes, and exhibiting the unexpected character of the root, were collected by the writer, in October, 1881, almost within the limits of the village of Napa. The above generic character is drawn from these specimens, supplemented by others which came, this year, from the vicinity of the Napa Soda Springs.

The character of *Lagophylla* is strengthened by this plant's re-

moval from it. Its three species agree in habit, in their annual root, their few-flowered heads, their yellow rays (always 5) which are not open much after sunrise, and in their akenes, both of ray and disk, being wholly destitute of pappus.

An Imperfectly-described Phalloid.

By CHARLES H. PECK.

(Plate xxv.)

The description of *Phallus Ravenelii*, B. & C., as published in *Grevillea*, Vol. ii, p. 33, is somewhat imperfect, and efforts to identify the specimens by it are likely to be unsatisfactory and perplexing. I could not myself feel fully satisfied that my specimens belonged to this species until, through the kindness of Mr. H. W. Ravenel, who first collected specimens of it, and for whom it was named, I was permitted to see the manuscript description which he made of it at the time of its discovery. His description is so full and agrees so accurately with my specimens that there is no longer any room for doubt concerning their identity, nor concerning the real characters of the species. The growing interest in these curious plants, and the desirableness of having the specific characters fully published, must be my apology for the notes here given.

Phallus Ravenelii is furnished with an indusium or veil, although the published description makes no mention of it. This omission, however, has been supplied by Prof. W. G. Farlow in his remarks concerning this species in the *Bulletin* of the Bussey Institute, 1878, p. 247; and the presence of the veil is also indicated in the *TORREY BULLETIN*, Vol. vii, p. 11, where Mr. W. R. Gerard has listed this species, with several others, in the section Hymenophallus, whose chief distinguishing characteristic is the veil. In our other indusiate species the veil is so large that it depends below the margin of the pileus in a conspicuous manner; and it is generally net-like in structure because of its numerous perforations. In this species the veil is without perforations and is divided into two parts, one of which is attached to the top of the stem and is concealed beneath the pileus, while the other is attached at the base of the stem and is concealed within the bulb. Sometimes there is also a small intermediate fragment which adheres to and surrounds the middle of the stem, but this is unusual. According to Mr. Ravenel's observations, while the stem and pileus are yet encased within the bulb these two parts of the veil are united, but as the stem elongates they are torn asunder, the one being carried up with the pileus, the other remaining in the bulb.

In *P. indusiatus*, *P. duplicatus* and *P. impudicus* the denuded pileus is coarsely reticulate-pitted, resembling in some degree the pileus of morels (*Morchella*), but in this species its structure is very different. In the description, the pileus is said to be "even," but in reality it is full of minute cells or cavities and has a cellular-spongy structure similar to that of the stem. These cavities or perforations in the upper or exterior surface are smaller than those of the lower or interior surface. They become visible when the spores have disappeared.